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10/606,178	06/24/2003	Alfred Tom	45818.00018	1505
30256 7590 02/22/2007 SQUIRE, SANDERS & DEMPSEY L.L.P PATENT DEPARTMENT			EXAMINER	
			LU, ZHIYU	
	ME PLAZA, SUITE 300 SCO, CA 94111-3492		ART UNIT	PAPER NUMBER
	,		2618	
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MOI		02/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/606,178	TOM, ALFRED			
		Examiner	Art Unit			
•		Zhiyu Lu	2618			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
WHIC - Exter after - If NO - Failu Any I	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAISIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status		<i>,</i>				
1)	Responsive to communication(s) filed on 09 Ja	nnuary 2007.				
, —	•	action is non-final.				
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
٠,١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disnositi	on of Claims					
•		annlication				
,—	4) Claim(s) 1-36 and 39-42 is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
′=	Claim(s) is/are allowed.					
•	6)⊠ Claim(s) <u>1-36 and 39-42</u> is/are rejected.					
•	Claim(s) is/are objected to.					
8)∟.	Claim(s) are subject to restriction and/or	r election requirement.				
Applicati	on Papers					
9)⊠ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>24 June 2003</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
	under 35 U.S.C. § 119					
•	•	nriarity under 25 H C C & 110/a) (d) or (f)			
	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a)	☐ All b)☐ Some * c)☐ None of:	- have been received				
	1. Certified copies of the priority document		Sam Nia			
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
		•				
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice	2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.					
· —	3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other:					
S. Patent and Trademark Office						

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-36 and 39-42 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the last three drawings labeled as prior art in the filed drawings are mentioned in paragraphs 0004 and 0041 of the published Application. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-4, 7-11, 16, 31-33, 35-36 and 39-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson (US Patent#5465401).

Regarding claim 1, Thompson anticipates a modular wireless device comprising:

a shell (50 of Fig. 2) that contains non-wireless components, at least one of which is system software (84 of Fig 7, column 10 lines 23-25);

a cartridge (100 of Fig. 2) that contains wireless components, at least one of which comes from a set of baseband and RF hardware (Fig. 10); and

a means for the shell and cartridge to exchange information (64 of Fig. 7); and a means for the modular wireless device to configure its operation based on said information (80 of Fig. 7).

Regarding claim 2, Thompson anticipates the limitation of claim 1.

Thompson anticipates the cartridge is removably connected to the shell (Fig. 5).

Regarding claim 3, Thompson anticipates the limitation of claim 1.

Thompson anticipates the shell contains at least one button (60a of Fig. 7), a display (60 of Fig. 7), and a microprocessor (80 of Fig. 7) and the cartridge contains protocol-stack software (184 of Fig. 7).

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Regarding claim 4, Thompson anticipates the limitation of claim 2.

Thompson anticipates the cartridge further includes replacement software; and the modular wireless device further includes means for transferring the replacement software to the shell; and the shell further includes means to upgrade, augment, or replace the system software using the replacement software (column 4 lines 7-23, column 7 lines 60-67).

Regarding claim 7, Thompson anticipates the limitation of claim 1.

Thompson anticipates the shell further includes a software application (column 10 lines 23-25); the shell has means for the software application to register with the system software for a wireless communication service (column 10 lines 23-25); and the modular wireless device further includes means for the cartridge to communicate wireless communication service availability to the system software (column 3 lines 18-51); and the system software has means to notify the software application of the availability of a wireless communication service in the cartridge (inherent), whereby the software application can configure its operation according to the wireless communication services available in the cartridge (column 3 lines 18-60).

Regarding claim 8, Thompson anticipates the limitation of claim 7.

Thompson anticipates the system software maintains a list or array of wireless communication services that specifies which such services the shell is able to support based on the shell's hardware characteristics (column 3 lines 23-36).

Regarding claim 9, Thompson anticipates the limitation of claim 8.

Thompson anticipates the system software has means for expanding the list or array to incorporate new wireless communication services (column 4 lines 7-20).

Regarding claim 10, Thompson anticipates the limitation of claim 8.

Thompson anticipates the cartridge has means of sending to the shell the wireless communication services supported by the cartridge; and the shell has means of using the list or array to determine which wireless communication services in the cartridge the shell is able to use (column 4 lines 7-23).

Regarding claim 11, Thompson anticipates the limitation of claim 2.

Thompson anticipates the shell further includes a first memory storage bin for storing subscriber information (column 3 lines 32-36); the cartridge includes a second memory storage bin for storing subscriber information (column 3 lines 37-45); and the modular wireless device further includes means for subscriber information to be exchanged between the shell and cartridge (column 4 lines 35-64).

Regarding claim 16, Thompson anticipates the limitation of claim 11.

Thompson anticipates the cartridge is directly connected to the first memory storage bin in the shell (84 and 184 of Fig. 7)

Regarding claim 31, Thompson anticipates the limitation of claim 2.

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Thompson anticipates the modular wireless device contains means for exchanging information related to communication preference values between the shell and cartridge, whereby the cartridge can obtain communication preference values from the user (column 4 lines 7-64).

Regarding claim 32, Thompson anticipates the limitation of claim 31.

Thompson anticipates the information includes the format of the desired communication preference value whereby the shell can tell the user how to enter a communication preference value (column 4 lines 35-64).

Regarding claim 33, Thompson anticipates the limitation of claim 32.

Thompson anticipates the format enables the cartridge to communicate to the shell that the communication preference value is optional (column 4 lines 35-64).

Regarding claim 35, Thompson anticipates the limitation of claim 31.

Thompson anticipates the shell has means for communicating a communication preference value to the cartridge once the communications preference value is entered by the user (column 4 lines 35-64).

Regarding claim 36, Thompson anticipates the limitation of claim 2.

Thompson anticipates the cartridge and shell have means to automatically exchange information when the cartridge is inserted into the shell (column 4 lines 7-64).

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Regarding claims 39-40, Thompson anticipates the limitations of claims 7 and 31.

Thompson anticipates the cartridge includes a software-defined radio (column 3 lines 54-60).

Regarding claim 41, Thompson anticipates the limitation of claim 1.

Thompson anticipates wherein the at least one wireless component is baseband hardware (Fig. 10, column 3 line 52 to column 4 line 6).

Regarding claim 42, Thompson anticipates the limitation of claim 1.

Thompson anticipates wherein the at least one wireless component is RF hardware (Fig. 10, column 3 line 52 to column 4 line 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US Patent#5465401) and Shin et al. (U.S. Patent#6198946).

Regarding claim 5, Thompson teaches the limitation of claim 4.

But, Thompson does not expressly disclose the system software contains a first version number; the replacement software contains a second vision number; and wherein the

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cartridge and shell have a means to exchange the first and second version numbers to determine whether the system software should be replaced.

Shin et al. teach the system software contains a first version number; the replacement software contains a second vision number; and wherein the wireless communication device has a means to exchange the first and second version numbers to determine whether the system software should be replaced (column 2 lines 56-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate checking software version numbers for upgrade taught by Shin et al. into the modular wireless device of Thompson, in order to make sure the system being upgraded but not degraded.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US Patent#5465401) in view of Zhang (US2001/0049263).

Regarding claim 6, Thompson teaches the limitation of claim 4.

But, Thompson does not expressly disclose the system software contains a first network operator identification; the replacement software contains a second network operator identification; and wherein the cartridge and shell exchange the first and second network operator identifications to determine whether the system software should be replaced Zhang also teaches the system software contains a first electronic serial number; the replacement software contains a second electronic serial number; and wherein the cartridge and shell exchange the first and second electronic serial numbers to determine whether the system software should be replaced (paragraph 0051), which would have

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been obvious to one of ordinary skill in the art to modify the electronic serial number as network operator identification in order to verify the correct network service to upgrade with.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate checking identification for upgrade taught by Zhang into the modular wireless device of Thompson, in order to make sure the network service is compatible with the software upgrade.

6. Claims 13-14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US Patent#5465401) in view of Tayloe (U.S. Patent#5987325).

Regarding claim 13, Thompson teaches the limitation of claim 11.

But, Thompson does not expressly disclose the information exchanged is used to determine which memory storage bins contain subscriber information.

Tayloe teaches exchanging information to check which memory storage bins contains subscriber information (column 4 lines 26-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate checking available subscriber information in two memory storage bins taught by Tayloe into the modular wireless device of Thompson, so that the device have options in using subscriber information.

Regarding claim 14, Thompson teaches the limitation of claim 11.

But, Thompson does not expressly disclose further including a means for determining whether to use the subscriber information in the shell or the subscriber information in the cartridge when both the first and second memory storage bins contain subscriber information.

Tayloe teaches exchanging information to check which memory storage bins contains subscriber information (column 4 lines 26-28) and the means to determine which subscriber information to be used when both memory storage bins contains subscriber information (column 4 lines 31-38).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate means to determine which subscriber information to be used in two memory storage bins taught by Tayloe into the modular wireless device of Thompson, so that user can use the best network service by default.

Regarding claim 19, Thompson teaches the limitation of claim 11.

But, Thompson does not expressly disclose the cartridge has a means for obtaining the subscriber information in the shell's memory storage bin and communicating the subscriber information to a wireless network.

Tayloe teaches exchanging information to check which memory storage bins contains subscriber information (column 4 lines 26-28), which would have been obvious to one of ordinary skill in the art to recognize Thompson's application module would use the subscriber information to communicate with a wireless network via its equipped wireless transceiver.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate subscriber information determination means taught by Tayloe into the modular wireless device of Thompson, in order to automatically communicate with wireless network.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US Patent#5465401) in view of Bishop et al. (US2002/0065106). Regarding claim 12, Thompson teaches the limitation of claim 11.

But, Thompson does not expressly disclose at least one of the memory bin is a SIM card. Bishop et al. also having a SIM card inside a removable card reader being inserted into a modular wireless device (Fig. 1, paragraphs 0012-0022), which would have been obvious to one of ordinary skill in the art to recognize the program memory in the application module of Thompson can be modified as a SIM card, so that cost of upgrade or replacement can be reduced.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate using SIM card as a memory bin taught by Bishop et al. into the modular wireless device of Thompson, in order to further reduce software upgrade or replacement cost.

8. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US Patent#5465401) in view of Tayloe (U.S. Patent#5987325) and Suprunov (U.S. Patent#6405030).

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Regarding claim 20, Thompson and Tayloe teach the limitation of claim 19.

But, Thompson and Tayloe do not expressly disclose the subscriber information contains data a wireless network needs to forward calls from a first phone number to a second phone number.

Suprunov teaches a memory card obtained the data a wireless network needs to forward calls (column 4 lines 11-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate call-forwarding data in the memory card taught by Suprunov into the modified modular wireless device of Thompson and Tayloe, in order to provide user call-forwarding service.

Regarding claim 21, Thompson, Tayloe, and Suprunov teach the limitation of claim 20. Suprunov teaches the data is an executable that the wireless network can execute to forward calls from a first phone number to a second phone number (column 4 lines 11-25).

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US Patent#5465401) in view of Bishop et al. (US2002/0065106) and Tayloe (U.S. Patent#5987325).

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Regarding claim 22, Thompson and Bishop et al. teach the limitation of claim 12.

Thompson and Bishop et al. also teach the SIM card and memory means include user data (inherent) and the modular wireless device includes means for synchronizing the user data in the SIM card and memory means (column 4 lines 7-20).

But, Thompson and Bishop et al. do not expressly disclose both memory storage bins are SIM cards.

Tayloe teach using two SIM cards in one modular wireless device (Figs. 1-2, abstract).

Thus, it would have been obvious to one of ordinary skill in the art to modify the data memory of the modified modular wireless device of Thompson and Bishop et al. into part of a SIM card, in order to provide conveniences to user in the cases of removable storage, security, and backup subscriber information if original SIM card is lost.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate having two SIM cards in one wireless device taught by Tayloe into the modular wireless device of Thompson and Bishop et al., in order to provide user conveniences of removable data storages.

10. Claims 15, 17-18, 23-25 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (US Patent#5465401) in view of Vilppula et al. (US Patent#6961587).

Regarding claim 15, Thompson teaches the limitation of claim 11.

But, Thompson does not expressly disclose further including a means for notifying the user which subscriber information will be used.

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Vilppula et al. teach network notifying mobile terminal selected subscriber information is available for use (column 8 lines 31-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate notifying user subscriber information usage taught by Vilppula et al. into the modular wireless device of Thompson, in order to notify user specific service usage.

Regarding claim 17, Thompson teaches the limitation of claim 11.

But, Thompson does not expressly disclose the first memory storage bin in the shell has means to store subscriber information related to more than one air-interface standard. Vilppula et al. teach the first memory storage bin in the shell has means to store subscriber information related to more than one air-interface standard (column 5 lines 7-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate storing subscriber information related to more than one air-interface standard taught by Vilppula et al. into the modular wireless device of Thompson, in order to communicate with more than one air-interface standard.

Regarding claim 18, Thompson and Vilppula et al. teach the limitation of claim 17.

Vilppula et al. teach the subscriber information in the first memory storage bin is

displayed according to the air-interface standard it corresponds to (column 7 lines 24-63).

Regarding claim 23, Thompson teaches the limitation of claim 2.

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But, Thompson does not expressly disclose further including a locking mechanism in the shell that prevents the shell from accessing the wireless communication services in the cartridge; and a means for unlocking the locking mechanism.

However, Thompson teaches using personal identification numbers to access various communication networks associated with the personal communication device (column 4 lines 57-62).

Vilppula et al. teach further including a locking mechanism in the shell that prevents the shell from accessing the wireless communication services in the cartridge; and a means (PIN code) for unlocking the locking mechanism (column 7 line 64 to column 8 line 13). Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate locking mechanism taught by Vilppula et al. into the modular wireless device of Thompson, in order to lock unauthorized user from accessing the device.

Regarding claim 24, Thompson and Vilppula et al. teach the limitation of claim 23. Vilppula et al. teach the means for unlocking the locking mechanism consists of a user entering a pass code into the shell (column 7 line 64 to column 8 line 30).

Regarding claim 25, Thompson and Vilppula et al. teach the limitation of 23.

Vilppula et al. teach the means for unlocking the locking mechanism consists of the shell obtaining a pass code from the cartridge (column 7 line 64 to column 8 line 13).

Regarding claim 27, Thompson teaches the limitation of claim 2.

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But, Thompson does not expressly disclose further including a locking mechanism in the cartridge that disables wireless communication services in the cartridge; and a means for unlocking the locking mechanism.

However, Thompson teaches using personal identification numbers to access various communication networks associated with the personal communication device (column 4 lines 57-62).

Vilppula et al. teach further including a locking mechanism in the cartridge that disables wireless communication services in the cartridge; and a means (PIN code) for unlocking the locking mechanism (column 7 line 64 to column 8 line 13).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate locking mechanism taught by Vilppula et al. into the modular wireless device of Thompson, in order to lock unauthorized user from accessing the device.

Regarding claim 28, Thompson and Vilppula et al. teach the limitation of claim 27. Vilppula et al. teach the means for unlocking the locking mechanism consists of the cartridge obtaining a pass code from the shell (column 7 line 64 to column 8 line 30).

11. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (U.S. Patent#5465401) in view of Vilppula et al. (US Patent#6961587) and Cooper (U.S. Patent#6321079).

Regarding claim 29, Thompson and Vilppula et al. teach the limitation of claim 27.

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But, Thompson and Vilppula et al. do not expressly disclose the means for unlocking the locking mechanism consists of a wireless network communicating a pass code to the cartridge.

Cooper teaches the means for unlocking the locking mechanism consists of a wireless network communicating a pass code to the SIM card (abstract, column 1 line 52 to column 2 line 54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate network operator sending pass code to unlock SIM card taught by Cooper into the modified modular wireless device of Thompson and Vilppula et al., in order to ensure the cartridge content match network service.

12. Claims 26 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (U.S. Patent#5465401) in view of Vilppula et al. (U.S. Patent#6961587) and Tayloe (U.S. Patent#5987325).

Regarding claims 26 and 30, Thompson and Vilppula et al. teach the limitations of claims 23 and 27.

But, Thompson and Vilppula et al. do not expressly teach the locking mechanism is automatically activated when the cartridge is removed from the shell.

Tayloe teaches the locking mechanism is automatically activated when the cartridge is removed from the shell (column 6 lines 1-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate locking automatically when removing cartridge from

the shell taught by Tayloe into the modified modular wireless device of Thompson and Vilppula et al., in order to protect subscriber identification from being misused or stolen.

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13. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thompson (U.S. Patent#5465401) in view of Butler (U.S. Patent#6687836).

Regarding claim 34, Thompson teaches the limitation of claim 32.

But, Thompson does not expressly disclose the format enables the cartridge to communicate to the shell that the communication preference value should be encrypted. Butler teaches encrypting password typed-in on display being a common practice (column 1 lines 58-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate encrypting typed-in password taught by Butler into the modular wireless device of Thompson, in order to prevent an onlooker from seeing a user's password.

Conclusion

14. The Examiner has noticed that limitations of claim 1 is very similar to the ones in claims 40 and 52 of U.S. Patent No. 6690947, where claimed a wireless device having a shell with system software, a cartridge with RF hardware, and exchanging information between the shell and the cartridge.

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Plus, the last three filed drawings that labeled "prior art" and paragraphs 0041 in the Applicant's published Application, the Applicant admits that the limitations of claim 1 as a prior art.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhiyu Lu whose telephone number is (571) 272-2837. The examiner can normally be reached on Weekdays: 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zhiyu Lu

February 8, 2007

SUPERVISORY PATENT EXAMINER